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Gilmore et al.(10) **Pub. No.: US 2012/0135524 A1**(43) **Pub. Date: May 31, 2012**(54) **NOVEL NUCLEIC ACID CONSTRUCTS
CONTAINING ORTHOGONAL SITE
SELECTIVE RECOMBINASES (OSSRS)**(75) Inventors: **Joshua M. Gilmore**, Emeryville,
CA (US); **J. Christopher
Anderson**, San Francisco, CA (US);
John E. Dueber, San Francisco,
CA (US)(73) Assignee: **THE REGENTS OF THE
UNIVERSITY OF
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9, 2008.**Publication Classification**(51) **Int. Cl.****C12N 15/01** (2006.01)**C12N 15/70** (2006.01)**C12N 1/21** (2006.01)**C12N 15/11** (2006.01)(52) **U.S. Cl. 435/441; 536/23.1; 435/320.1;
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(57)

ABSTRACT

The present invention provides for a recombinant nucleic acid comprising a nucleotide sequence comprising a plurality of constructs, wherein each construct independently comprises a nucleotide sequence of interest flanked by a pair of recombinase recognition sequences. Each pair of recombinase recognition sequences is recognized by a distinct recombinase. Optionally, each construct can, independently, further comprise one or more genes encoding a recombinase capable of recognizing the pair of recombinase recognition sequences of the construct. The recombinase can be an orthogonal (non-cross reacting), site-selective recombinase (OSSR).